

REMARKS

Claims 23-24, 26-28, and 30-45 remain pending in the application. Applicants gratefully acknowledge the allowance of claims 32 and 34-39. As such, only independent claim 23, along with dependent claims 24, 26-28, 30, 31, 33 and 40-45 stand rejected. In view of the following remarks, Applicants respectfully request reconsideration and allowance of the rejected claims.

Applicants' counsel wishes to thank Examiners Hsiao and Siconolfi for the courtesies extended during the personal interview on December 11, 2007. During the interview, independent claim 23, as previously amended, was discussed in light of the prior art. A prior art brake application unit was also shown to the Examiners to facilitate a general understanding of commercial disc brake technology. The following records the substance of the interview, in which it was agreed that claim 23, as previously amended, defines over the art of record.

In the Office Action, independent claim 23, along with various dependent claims, were rejected as being obvious over ORTEGREN et al. (US 6,558,981) in view of SEVERINSON (US 5,833,035). Applicants respectfully traverse this rejection as discussed.

Applicants' independent claim 23 recites a disc brake for a commercial vehicle. The disc brake comprises a caliper and a brake application unit arranged in the caliper for applying a braking force. At least one adjustment

device is arranged in the caliper for offsetting brake lining and/or brake disc wear. The adjustment device comprises two axially displaceable adjustment elements, each of which has a respective pressure piece plate that forms a pressure piece.

A common connector plate fixes in a torsion resistant manner end areas of the two axially displaceable adjustment elements, which end areas face a respective brake lining. The respective pressure piece plates are positioned on the common connector plate. And, a heat insulation layer is attached on a side of the respective pressure piece plates that faces the brake lining.

As shown in the exemplary embodiment of Figure 6, the common connector plate 15 fixes in a torsion resistant manner the end area of the axially displaceable adjustment elements 9. Each adjustment element 9 has a respective pressure piece plate 26 that forms a pressure piece 11. As shown in Figure 6, the pressure piece plate 26 is positioned on the common connector plate 15, and the heat insulation layer (13) shown in the cross-sectional view of Figure 7 is attached on the respective pressure piece plates 26 on the side facing the brake lining (see paragraphs 58-66).

In contrast, neither ORTEGREN nor SEVERINSON, taken alone or in combination disclose the use of a pressure piece plate positioned on a common connector plate wherein a heat insulation layer is attached on the pressure piece plate on the side thereof facing the respective brake lining. Contrary to the

Office Action, ORTEGREN merely discloses a common thrust plate (pressure piece) 38 coupled to a thrust screw 39 (see col. 4, lines 60-67). Alternatively, ORTEGREN discloses individual thrust plates 5 (see Fig. 5) arranged on adjusting screws 4 (see col. 2, lines 62-64). Even assuming for arguments sake that ORTEGREN's single thrust plate 38 is construed as a common connector plate, ORTEGREN still does not disclose or suggest a pressure plate positioned on a common connector plate, or a heat insulation layer attached to a pressure plate on the common connector plate.

Nor are these deficiencies remedied by SEVERINSON. The thrust plates 81 of SEVERINSON are not on a common connector plate, but rather pressed directly against a heat shield layer 7 that is arranged on the brake lining support (pad holder) plate 6 (see col. 3, lines 11-13). Thus, while SEVERINSON describes a heat insulation layer, it is used to attach the brake pad and brake holder to the two thrust plates 81.

One Skilled In The Art Would Not Make The Proposed Combination

At the top of page 3 of the Office Action, it is acknowledged that ORTEGREN lacks a pressure piece plate. Additionally, it is noted that ORTEGREN also lacks a heat insulation layer (see page 2, last paragraph, of Office Action). The Office Action argues that one of ordinary skill in the art would find it obvious to provide a pressure piece plate in lieu of the notched end

section 39 shown in Figure 6 of ORTEGREN. The alleged rationale for doing so is that the skilled artisan would find it:

“obvious to replace the notched ends with a separate plate of harder material that is able to withstand more force than the thrust units 39. Since the whole thrust unit doesn’t have to be made from the more expensive harder material used for the pressure plate, the material used would be reduced and cut costs”. (Office Action, page 3, lines 4-7).

Applicants respectfully submit, however, that as discussed, one skilled in the art would not utilize a harder material for the plate than for the thrust units. Indeed, generally the opposite is true. That is, because the pressure plate provides a greater surface area for transmitting the high reaction brake forces from the brake disc into the caliper, in comparison to the reduced cross-sectional surface area of the adjustment element, it is necessary to provide the adjustment element from a harder material, in which case a softer material may be used for the pressure plate. Thus, one skilled in the art would not consider the rationale set forth in the Office Action as an obvious choice to facilitate the combination.

In view of foregoing, Applicants submit claim 23 is patentable over ORTEGREN in view of SEVERINSON. Further, claims 24, 26-28, 30, 31, 33 and 40-45 all depend from claim 23 and are also submitted to be patentable over the cited references.

In view of the foregoing, Applicants submit all pending claims are now in condition for allowance. An early notice to that effect is solicited.

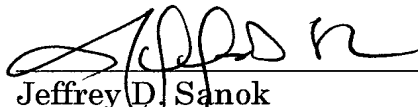
Serial No. 10/522,755
Amendment Dated: December 12, 2007
Office Action Mailed: November 1, 2007
Attorney Docket No. 037068.55814US

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #037068.55814US).

Respectfully submitted,

December 12, 2007


Jeffrey D. Sanok
Registration No. 32,169

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
JDS:pct